

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for sealing a fibre-based material to a counter-surface to be bonded to the material by melting polymer present at a seal point, comprising:

directing a laser beam of wavelength not greater than 1500 nm from a diode or Nd:YAG laser source to through a fibre layer of the material, a first part of the laser beam being scattered within said fibre layer and a second part of the laser beam passing through said fibre layer to reach a radiation-absorbing pigment disposed in a sealing area on an opposite side of said fibre layer, so that wherein

said second part of the laser beam heat-melts polymer present at the seal point is ~~absorptive heat melted~~ and seals the fibre-based material ~~is sealed~~ to the counter-surface of the material, ~~wherein~~

~~a laser source of the laser beam is a diode or Nd:YAG laser; and~~

~~the laser beam has a wavelength of not greater than 1500 nm.~~

2. (Previously presented) A method as defined in claim 1, wherein the fibre-based material is a polymer-coated paper or board having a polymer coating thereon, and

the polymer-coated paper or board is sealed to said counter-surface placed adjacent to said polymer coating.

3. (Withdrawn) A method as defined in claim 1 or 2, wherein the fibre-based material is sealed to a counter-surface containing polymer placed adjacent the material, such as a polymer film.

4. (Previously presented) A method as defined in claim 1, wherein the pigment is included in the fibre-based material to be sealed.

5. (Withdrawn) A method as defined in claim 1, wherein the pigment is included in a member forming the counter-surface, to which the fibre-based material is to be sealed.

6. (Withdrawn) A method as defined in claim 1, wherein the pigment is located on the surface of the fibre layer.

7. (Withdrawn) A method as defined in claim 6, wherein the pigment is located under said polymer coating of a paper or board.

8. (Previously presented) A method as defined in claim 1, wherein the pigment is dispersed in a polymer layer of a coating or a film disposed on said fibre-based material.

9. (Withdrawn) A method as defined in claim 8, wherein the pigment is included in the uppermost layer of a multi-layer polymer coating or film disposed on said fibre-based material.

10. (Withdrawn) A method as defined in claim 8, wherein the pigment is included in an inner layer of a multi-layer polymer coating or film disposed on said fibre-based material.

11. (Previously presented) A method as defined in claim 1, wherein the pigment contains carbon black.

12. (Previously presented) A method as defined in claim 1, wherein the fibre-based material is a polymer-coated paper or board is sealed to an adjacent polymer layer.

13. (Previously presented) A method as defined in claim 12, wherein the polymer-coated paper or board is sealed against itself.

14. (Previously presented) A method as defined in claim 13, wherein the method is used for lateral sealing or closing of casing, container or bag packages made of polymer-coated paper or board.

15. (Cancelled)

16. (Previously presented) A method as defined in claim 1, wherein the laser source of the laser beam is a diode.

17. (Previously presented) A method as defined in claim 1, wherein the laser source of the laser beam is a Nd:YAG laser.

18. (Previously presented) A method as defined in claim 2, wherein the laser source of the laser beam is a Nd:YAG laser.

19. (Previously presented) A method as defined in claim 4, wherein the laser source of the laser beam is a Nd:YAG laser.

20. (Previously presented) A method as defined in claim 1, wherein the laser beam has a wavelength of 500-1500 nm.